



**The University of Texas Health Science Center Houston
The Southwest Center for Occupational and Environmental Health (SWCOEH)**

Annual Program Report

Reporting Period: July 1, 2013 – June 30, 2014

Principal Investigator: Elaine Symanski, PhD

Section I – The SWCOEH Education and Research Center

Summary

The overall goal of the SWCOEH Education and Research Center (ERC) at the University of Texas School of Public Health (UTSPH) is to respond to the critical need for well-trained occupational and environmental health specialists by providing graduate level academic and research training and continuing education. The UTSPH has a unique, multi-campus system, with the main campus located in the Texas Medical Center in Houston and five regional campuses in Austin, Brownsville, Dallas, El Paso and San Antonio. The ERC programs, faculty and students are located in Houston and San Antonio primarily in the Division of Epidemiology, Human Genetics and Environmental Sciences and the Division of Health Promotion and Behavioral Sciences with supporting faculty from other disciplines inside and outside of the UTSPH. All campuses are linked electronically, facilitating quality teaching and research, expanded course offerings, interdisciplinary collaboration and access to regional stakeholders as well as expanding our reach to minority student populations. The ERC has been continuously funded since it was established in 1977. The ERC provides master level training in Industrial Hygiene (IH), doctoral level training in IH and Occupational Epidemiology, and postdoctoral residencies in Occupational Medicine. In addition to the academic degree programs, the ERC has active Continuing Education and Outreach Programs and a Pilot Projects Research Training Program that provide a full spectrum of training opportunities. SWCOEH faculty and trainees are involved in research spanning areas that include military health, ergonomics, farmworker health, workplace violence and air pollution epidemiology. An external advisory board comprised of members from industry, labor, government, NGOs, and academia provide guidance to the SWCOEH on current and future directions.

Center-wide, our specific objectives are to (1) facilitate occupational safety and health research and training; (2) continuously improve by conducting assessments in accordance with program-specific evaluation plans, and revising these plans, as necessary; (3) successfully manage academic and non-academic programs; (4) enhance the funding base of the SWCOEH; and (5) effectively communicate with stakeholders.

For the 2014 fiscal year, we are funding a total of 13 trainees; our Continuing Education Program plans to offer approximately 75 courses to about 2,000 participants and our Pilot Project Research Training

Program granted seven awards to support occupational safety and health research in Public Health Region 6 (PHR 6), includes Arkansas, Louisiana, New Mexico, Oklahoma and Texas.

Relevance

The UTSPH ERC provides advanced degree training in occupational health and safety to meet the critical need for trained professionals in PHR 6. A full spectrum of degree programs, advanced research training, and continuing education courses help meet the needs in the Region for well-trained professionals to protect the health and safety of the nation's workforce.

Current Key Personnel

Elaine Symanski, PhD, Principal Investigator and SWCOEH Director

Contact: Elaine.Symanski@uth.tmc.edu, 713.500.9238

Janelle Rios, PhD, SWCOEH Deputy Director and Director of Continuing Education and Outreach

Contact: Janelle.Rios@uth.tmc.edu, 713.500.9477

Arch "Chip" Carson, MD, PhD, Director of Occupational and Environmental Medicine

Contact: Arch.Carson@uth.tmc.edu, 713.500.9465

David Douphrate, PhD, Director of Pilot/Small Projects Research Training

Contact: David.I.Douphrate@uth.tmc.edu, 210.276.9005

David Gimeno, PhD, Director of Occupational Epidemiology

Contact: David.Gimeno@uth.tmc.edu, 210.276.9011

Inkyu Han, PhD, Director of Interdisciplinary Coordination

Contact: Inkyu.Han@uth.tmc.edu, 713.500.9260

Mary Ann Smith, PhD, Director of Diversity Recruitment and Retention

Contact: Mary.A.Smith@uth.tmc.edu, 713.500.9236

Lawrence Whitehead, PhD, Director of Industrial Hygiene

Contact: Lawrence.Whitehead@uth.tmc.edu, 713.500.9458

ERC Web Link

Additional information about the SWCOEH is available at www.swcoeh.org.

Section II – High Impact Program Highlights

Industrial Hygiene

Directed by Dr. Lawrence Whitehead

SWCOEH Industrial Hygiene (IH) trainee Jennifer Laine presented her research paper "Ergonomic Evaluation of the New Chemical Protective Suit for Military Emergency Responders" at the American Industrial Hygiene Conference and Exposition in June 2014, winning the 'Best in Session' award. Recent graduate Dr. Rachel Gamble presented her research "The Feasibility of Using a Rapid Adenosine

Triphosphate Bioluminescence Detection Assay as an Objective Means of Assessing the Presence of Biological Contamination on Laboratory Surfaces” at the Southern Biosafety Spring 2014 Symposium in Dallas, Texas on May 15, 2014; this research has been accepted for publication in the journal *Applied Biosafety*.

Dr. Dave Douphrate received the distinguished Certified Professional Ergonomist (CPE) credential from the Board of Certification in Professional Ergonomics.

Occupational and Environmental Medicine

Directed by Dr. Arch “Chip” Carson

During the past year, the Occupational and Environmental Medicine (OEM) Residency graduated three OEM physicians, all of whom completed the MPH degree and the ACGME-accredited OEM Residency. Two of those graduates are now in clinical OEM practice at a corporate management level; Dr. Kemka Hekerem now holds a position as Medical Center Director for Excel Health Systems in Katy, Texas and Dr. Yomi Adekeye accepted a position as Occupational Medicine Physician at Everett Clinic in the Seattle, Washington area. Dr. Dalia Nessim joined the Occupational Medicine faculty of The University of Texas at Tyler as Assistant Professor. Dr. Nessim made a significant contribution to the NIOSH personal/occupational risk factor project and is continuing to work on that project toward completion.

Occupational Epidemiology

Directed by Dr. David Gimeno

SWCOEH Occupational Epidemiology (OE) trainees and graduates are involved in many notable activities. Sarai Conway received a competitive scholarship to present a poster describing an exposure assessment model for long working hours and cancer risk at the International Epidemiology in Occupational Health Conference (EPICOH) in Chicago in June 2014. Laura Lee received competitive funding from the Pilot Project Research Training Program to study the links between occupational physical activity and stress and adverse birth outcomes using data from the National Birth Defects Prevention Study and the Occupational Information Network. Ms. Lee also received a scholarship to present her dissertation research at the regional National Occupational Research Agenda (NORA) symposium in Salt Lake City, Utah in April 2014. Recent graduate trainee Dr. Christina Socias, currently a CDC/NIOSH Epidemic Intelligence Service Officer, published Occupational Ladder Fall Injuries-United States in the CDC Morbidity and Mortality Weekly Report in April 2014.

In fall 2013, Dr. Hasanat Alamgir was invited to the Collegium Ramazzini in Carpi, Italy to present his paper “The global economic change and its impact on occupational and environmental health in Bangladesh.” Dr. Sharon Cooper was awarded the Jane Dale Owen Professorship in Environmental Health Protection in fall 2013. Dr. Elaine Symanski served on a National Research Council Committee to Review the Styrene Assessment in the National Toxicology Program 12th Report on Carcinogens.